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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,246	12/10/2003	Seok-Kyu Lee	053933-5059	5700
9629	7590 07/01/2005		EXAM	INER
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW			PATEL, ISHWARBHAI B	
WASHINGTON, DC 20004		•	ART UNIT	PAPER NUMBER
	•		2841	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/731,246	LEE ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ishwar (I. B.) Patel	2841			
The MAILING DATE of this communic	cation appears on the cover sheet wi	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOTHE MAILING DATE OF THIS COMMUNION. - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30). - If NO period for reply is specified above, the maximum states a specified above, the maximum states are specified above.	CATION. of 37 CFR 1.136(a). In no event, however, may a reunication.) days, a reply within the statutory minimum of thirty cutory period will apply and will expire SIX (6) MON will, by statute, cause the application to become AB	eply be timely filed (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status		<i>~</i> :			
1) Responsive to communication(s) filed	d on <u>10 December 2003</u> .				
2a) This action is FINAL .	This action is FINAL . 2b) ☐ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) <u>1-25</u> is/are pending in the ap 4a) Of the above claim(s) is/are 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) <u>1-25</u> are subject to restriction	e withdrawn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)	_				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Cher:					

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-16 and 23-25, drawn to a method of manufacturing a printed circuit board, classified in class 29, subclass 830+.
 - Claims 17-22, drawn to a printed circuit board, classified in class 174, subclass 260.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions group I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process. The product can be made by using a precut power layer instead of etching the layer after layering. Also, the product can be made by using a roughened copper foil to start with, instead of forming a ground layer on a printed circuit board and than roughening the same.

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- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.
- 4. A telephone call was made to Robert J. Goodell (Reg. 41,040) on June 15, 2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ishwar (I. B.) Patel whose telephone number is (571) 272 1933. The examiner can normally be reached on M-F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272 1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ishwar (I. B.) Patel

Examiner

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June 27, 2005